

Terms of Reference (ToR)

Terminal Evaluation (TE) – UNDP GEF Sustainable Energy Financing Mechanism for Solar PV in Forest Villages in Turkey (ORKÖY-PV) Project

1. INTRODUCTION

In accordance with UNDP and GEF M&E policies and procedures, all full- and medium-sized UNDP-supported GEF-financed projects are required to undergo a Terminal Evaluation (TE) at the end of the project. This Terms of Reference (ToR) sets out the expectations for the TE of the full-sized project titled “Sustainable Energy Financing Mechanism for Solar PV in Forest Villages in Turkey (ORKÖY-PV Project)” (PIMS ID: 5323) implemented through the Implementing Partner General Directorate of Forestry (GDF) of the Ministry of Agriculture and Forestry (MoAF). The project started on the 23 August 2016 and is in its 6th year of implementation. The TE process must follow the guidance outlined in the document [‘Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects’](#).

2. PROJECT BACKGROUND AND CONTEXT

Turkish Constitution Article 170 states that measures shall be introduced by law to secure cooperation between the State and the inhabitants of villages located in or near forests in the supervision and exploitation of forests for the purpose of ensuring conservation of forests and their integrity, and improving the living conditions of these inhabitants. 11th National Development Plan (2019-2023) lays the ground for ensuring uninterrupted, high-quality, sustainable, reliable and affordable energy supply, using renewable resources more intensively in the generation of electrical energy, expanding buildings that are more efficient and extending unlicensed solar power plant and wind power plant applications to meet prosumers’ own electricity needs.

Turkey views renewable energy resource utilization critically important to sustain its economic growth while fulfilling its commitments for climate change and environmental sustainability. Hence, Turkey attaches great importance to the development of renewable energy sources. In accordance with the National Energy Policy adopted in 2017, increasing the use of domestic and renewable energy resources is among the main priorities. Furthermore, the country has ranked 5th in Europe and 12th in the world in terms of installed capacity in renewable energy. The share of renewables in Turkey’s installed power reached to 53.1% as of July 2021. In 2019, the share of renewables in electricity production was above EU 27 and OECD average according to Eurostat and IEA data and beyond Germany (EU av. 34.1%; OECD av. 27%; Germany 40.8%). According to IRENA, as of the end of 2020, Turkey has ranked 4th in the world with its 1,613 MW installed capacity in geothermal energy. Also, Turkey has ranked 9th in the world and 4th in Europe in renewable energy installed capacity growth in 2020.

In January 2021 new renewable energy support mechanism for post June-2021 period was announced and it will pave the way for the new private sector green energy investments. The 11th National Development Plan (2019-2023) set the target of the electricity generation from renewables as 38.8% for 2023. Renewable energy targets in Ministry of Energy and Natural Resources’ Strategic Plan (2019-2023) for solar and wind are 10 GW and 11.8 GW by 2023, respectively. Turkey will continue to promote the addition of more renewable capacity and aims to commission at least 1 GW solar and 1 GW wind capacity each year until 2027.

Turkey has reflected its ambition for promoting renewable energy in its Intended Nationally Determined Contribution (INDC) as well as in relevant strategy documents, development plans and programs such as the 11th National Development Plan (2019-2023), National Climate Change Strategy and Action Plan, Ministry of

Energy and Natural Resources (MENR) 2019-2023 Strategic Plan, National Energy Efficiency Action Plan 2017-2023 and Turkish Electricity Transmission Corporation (TEİAŞ) 2019-2023 Strategic Plan.

Turkey's forest villages, the target of this Project, are generally impoverished with government support required to mitigate population losses in these communities due to the paucity of economic opportunities for their residents. ORKÖY is the Forest Village Relations Department within the GDF under MoAF. Forest villages are eligible for financial and technical support by the ORKÖY Department within GDF. ORKÖY was founded in 1970 and has gone through several organizational changes. Until recently, ORKÖY was itself a General Directorate but following changes in the structure of MoAF, it has been placed under GDF as a department. ORKÖY aims to contribute to the conservation of forests by supporting local communities. It has been operating a grant/loan program since 1974 targeting the forest villagers. ORKÖY is running two grant/loan systems: 1 - social (non-profit projects, including grants, available only for individuals) and 2 – economic (typically 20 % grant, available for both individuals and cooperatives). As a measure to assist these communities in breaking out of a vicious poverty cycle, ORKÖY through its resources has had plans to continue promoting renewable energy technologies within these communities, replicating the successful and still ongoing solar water heating program. However, legislation prior to the commencement of this Project was not supportive of providing renewable energy concessions, which would improve the access of households in these communities to affordable renewable energy technologies such as solar PV. Moreover, the past renewable energy incentives such as the feed in tariff (FiT) favor those households deemed to be sufficiently wealthy to invest in these technologies.

The ORKÖY-PV Project seeks to address several problems deemed as obstacles to solar PV technologies in forest villages including:

- the approval process for installations for renewable energy technologies is long, arduous and protracted;
- poor FiT and tenure pricing levels that serve as a disincentive for development of local renewable energy generation, especially considering the FiT relative to import electricity prices;
- prohibitive costs to community generation schemes that include costs for the connections to transmission lines and distribution companies, and re-importing electricity at higher costs for the benefit of utility companies, thus substantially reducing the net-benefit to the community;
- complex and highly bureaucratic administrative processes;
- lack of functional solar PV installations in forest villages that could convince residents to invest in renewable energy technologies.

The main objective of the ORKÖY-PV Project is to “support the successful launching of a sustainable energy financing mechanism within the ORKÖY credit mechanism to ensure that there is at least 30 MW of installed capacity of grid-connected, cooperative solar PV in forest villages (approximately 2.5% or 175,000 people living in forest villages will have their electricity needs met by solar PV) by the end of the project”. The project was designed to reach its objective by:

- developing and expanding the policy and institutional framework to promote on-grid, residential solar PV (Component-1);
- demonstrating the technical and economic viability as well as the business model of the ORKÖY sustainable energy financing mechanism for solar PV systems through 4 pilot installations (Component-2);
- scaling up and replication at the national level (Component-3).

The financing scheme is divided into 4 phases. The first one will use grants only for financing of the pilot sites installation; second phase will use combination of GEF and ORKOY grants and ORKOY soft loan; third phase will

introduce commercial loan together with GEF/ORKOY grants and ORKOY soft loan and the last phase will use deferred supplier payment tool in combination with ORKOY grant/soft loan and commercial line of credit.

Project Title:	<i>Sustainable Energy Financing Mechanism for Solar PV in Forest Villages in Turkey (ORKÖY-PV Project)</i>			
UNSDCF Outcome and CPD Output:	<i>UNSDCF Outcome 3.1: By 2025, all relevant actors take measures to accelerate climate action, to promote responsible production and consumption, to improve the management of risks and threats to people, to ensure sustainable management of the environment and natural resources in urban and ecosystem hinterlands.</i> <i>CPD Output 3.3: Solutions developed, financed and applied at scale for energy efficiency and transformation to clean energy and low-carbon development</i>			
SDGs served	<i>SDG 7, to ensure access to affordable, reliable, sustainable and modern energy for all, SDG 13, to take urgent action to combat climate change and its impacts, SDG 1, to end poverty in all its forms everywhere, and SDG 15, to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.</i>			
GEF Project ID:	5098		<u>at endorsement</u> <u>(Million US\$)</u>	<u>at the time of evaluation</u> <u>(Million US\$)</u>
UNDP Project ID:	5323	GEF financing:	3.780	2.954
Country:	Turkey	IA/EA own:	0.200	0.000
Region:	Europe and CIS	Government:	47.675	0.000
Focal Area:	Climate Change	Other:	4.625	0.000
FA Objectives, (OP/SP):	FA Objective #3 for GEF 5: Promoting investment in renewable energy technologies	Total co-financing:	52.500	0.994
Implementing Partner:	Ministry of Agriculture and Forestry (MoAF)	Total Project Cost:	56.280	0.994
Other Partners involved:	N/A	ProDoc Signature (date project began):		23 August 2016
		(Operational) Closing Date:	Proposed: 28 February 2023	Actual: 29 August 2022

Due to changes in the legislation, the project scope was limited to rooftop PV applications at forest villages through implementation of a pilot grant blended soft loan programme with GDF. New legislation has come into effect in 10 and 12 May 2019 that supports government policies to ensure that solar PV installations for residential consumers are used only for consumption by the households, and not for the sale of electricity into the grid. As a result, this new legislation provided clarity that unlicensed solar PV plants would only be solar PV rooftop installations with capacities that are commensurate to their actual electricity consumption. New legislation also includes:

- allowing households to install up to 10 kW of installed capacity on rooftops;
- allowing industrial establishments to install up to 5 MW of installed capacity;
- an obligation by government to net metering to purchase any excess electricity generated by the solar PV rooftop installation at a rate determined by the Energy Regulatory Commission that is

reviewed every 3 months. The FiT (feed-in tariff rate for selling electricity to the grid) at the start of the ORKÖY-PV Project was USD 0.13 per kWh. The fluidity of the new tariff rates and installed capacity commensurate to the households' electricity consumption ensures that *any scheme with forest villages solar PV would not be focused on the sale of excess electricity by solar PV installations in forest villages*; measures to streamline the application process for rooftop solar PV. This includes the applicant receiving a permit from TEDAS for the rights to an installed capacity commensurate to their actual monthly electricity consumption, involving municipalities to ensure the rooftops have the static strength for solar PV installations, and decreasing application costs for rooftop solar PV.

Therefore, renewable energy cooperatives model for forest villages had to be abandoned due to ineligibility under new legislation, limiting the achievement of project's targets related to the installed capacity. To this end, General Directorate of Forestry (GDF) is currently implementing the **ORKÖY-PV project in cooperation with UNDP** through a blended pilot scale loan program for pilot scale self-consumption rooftop PV installations with **Global Environment Fund (GEF) funds** and Forest Village Relations (aka ORKÖY) Department's resources allocated by the government particularly to assist forest villages. **Through this pilot scale scheme, combined with GEF grants, the government meets almost half of the capital and loan expenditure for the villagers who practically pay back only half of the costs.** So far, the amount of CO₂ emissions lifted from energy production has reached **900 tons CO₂eq** which will grow with full operationalization of the already installed **1.6 MW** of ground-mounted and rooftop solar PV systems leveraging nearly **3 million USD** worth of grant blended private investment. The installed capacity has reached 1.6 MW with 86 forest villages and 1000 households involved with 1,444,909 USD grant and 993,667 USD government co-financing.

Amendments and extensions:

12.07.2019 – Mid-Term Review – Revision of Log Frame

31.01.2020 – Project Extension granted for 24 Months

3. TE PURPOSE

The TE will be conducted as all full-sized projects (FSPs), projects with a GEF grant value of more than US\$2 million, and all programmes must complete a Mid-Term Review and Terminal Evaluation.

This Terminal Evaluation has the following **purposes**:

- To measure to what extent the Project has contributed to solve the needs identified in the design phase.
- To measure Project's degree of implementation, efficiency and quality delivered on expected results (outputs) and specific objectives (outcomes), against what was originally planned or officially revised.
- To measure the project contribution to the objectives set in the UNDP Country Program Document (CPD), United Nations Sustainable Development Cooperation Framework (UNSDCF), Turkey's Intended Nationally Determined Contribution (INDC) submitted to UNFCCC, 11th National Development Plan of Turkey, Turkey's National Climate Change Strategy and Action Plan, Strategic Plan of Ministry of Energy and Natural Resources, National Rural Development Plan and Strategy, along with relevant SDGs.
- To assess both negative and positive factors that have facilitated or hampered progress in achieving the Project outcomes, including external factors/environment, weakness in design, management and resource allocation.
- To assess the extent to which the application of the rights-based approach and gender mainstreaming are integrated within planning and implementation of the Project.

- To generate substantive evidence-based knowledge by identifying best practices and lessons learned that could be useful to other development interventions at national (scale up) and international level (replicability) and to support the sustainability of the Project or some of its components.

4. TE APPROACH & METHODOLOGY

The TE report must provide evidence-based information that is credible, reliable and useful.

The TE IC will review all relevant sources of information including documents prepared during the preparation phase (i.e. PIF, UNDP Initiation Plan, UNDP Social and Environmental Screening Procedure/SESP) the Project Document, project reports including annual PIRs, project budget revisions, lesson learned reports, national strategic and legal documents, and any other materials that the IC considers useful for this evidence-based evaluation. The TE IC will review the baseline and midterm GEF focal area Core Indicators/Tracking Tools submitted to the GEF at the CEO endorsement and midterm stages and the terminal Core Indicators/Tracking Tools that must be completed before the TE field mission begins.

The TE IC is expected to follow a participatory and consultative approach ensuring close engagement with the Project Team, government counterparts (the GEF Operational Focal Point), Implementing Partners, the UNDP Country Office, the Regional Technical Advisor, direct beneficiaries and other stakeholders.

Engagement of stakeholders is vital to a successful TE. Stakeholder involvement should include interviews with stakeholders who have project responsibilities, including but not limited to executing agencies, senior officials and task team/component leaders, key experts and consultants in the subject area, Project Board, project beneficiaries, academia, local government and CSOs, etc. specified in the below list:

- The main stakeholder of the ORKÖY-PV Project is the ORKÖY Department (the Forest Village Relations Department within GDF under MoAF).
- Ministry of Environment, Urbanization and Climate Change (MoEUCC), serves as the focal point of UNFCCC, and hosts the Presidency of Climate Change and is relevant to ORKÖY-PV as it pertains to its MRV legislation;
- The Ministry of Energy and Natural Resources (MoENR) is responsible for developing energy policy for Turkey and policies related to natural resource use. In particular, their General Directorate of Energy Affairs (EIGM) is the key organization in the setting of renewable energy policies in Turkey;
- Presidency of Strategy and Budget (PSB) is responsible for defining, assessing, and monitoring programme outputs towards country-level outcomes that will ensure ORKÖY-PV results are linked to national development plans;
- Turkish Electricity Distribution Company (TEDAS) is the state economic enterprise responsible to undertake approval procedure of unlicensed renewable energy projects including photovoltaics according to the related legislations (i.e. Law#5346 “Law on Utilization of Renewable Energy Sources For the Purpose of Generating Electrical Energy”). TEDAS is the key stakeholder of the project. TEDAS identifies the energy project’s structure, properties etc. All energy projects are currently approved by TEDAS before they are initiated;
- Turkish Electricity Transmission Company (TEIAS) is the state economic enterprise responsible for transmission of electricity within the country. TEIAS is a key stakeholder to the project in terms of defining the quotas for electricity feed in. The regional distribution utilities approach TEIAS and ask for suitability of energy projects in terms of quotas;
- Energy Market Regulatory Authority (EPDK) performs the regulatory and supervisory functions in the energy market, key to overcome specific barriers in terms of defining the methodology, permissions and ensuring the replicability of the project results;

- Turkish Utilities (Private sector) will purchase the electricity provided by the solar PV systems through power purchase agreements, either on the spot market or through longer-term agreements. Electricity will be purchased in accordance with the Turkish legislation on preferential feed-in-tariffs for renewable energy. This includes Osmangazi EDAŞ as the regional electricity distribution company for Afyon Project site, Fırat EDAŞ as the distribution company in Elazığ Region, Yeşilirmak EDAŞ as the distribution company for Çorum and finally Meram EDAŞ as the company for Konya region;
- Forest Cooperatives and the OR-KOOP. Forest cooperatives are legal non-governmental bodies consisting of forest villagers with a mandate of development of forest villagers. OR-KOOP (Central Union of Turkish Forest Cooperatives) is the organization that is representing the forest cooperatives in Turkey with its headquarter in Ankara. OR-KOOP is an organization that is founded by 27 regional forest cooperative unions with more than 2,000 cooperative members. The forest cooperatives are eligible to be supported by ORKÖY;
- Forest Village Legal Entity is the smallest governance body in Turkey. It is managed by the “Mukhtar”, Head of Village, who was elected for 5 years period during national elections. Forest village legal entities are eligible to be supported by ORKÖY;
- International Solar Energy Society (Turkish Section-GUNDER) is the umbrella organization of solar PV companies in Turkey. The aim of the society is to promote all activities directed at the better utilization of solar energy. Since GUNDER is an umbrella organization serving not only governmental bodies but also private sector, GUNDER is a partner of the GEF project. Some of technical support activities will be implemented by GUNDER along with capacity development activities for sustainable energy finance program;
- Solar PV installers/manufacturers (private sector) to install and maintain solar PV equipment for forest villagers who will have successfully obtained financing either from the ORKÖY soft loans or later from domestic and international banks. They are mostly the members of the GUNDER; and
- Domestic and International Banks (private sector). Domestic and international banks would have no role in the project as they cannot compete with zero interest soft loans from ORKÖY. However, the ORKÖY soft loan programme (initially US\$ 45 million) is possibly not large enough to cover the financing to meet the Government’s NCCAP lower carbon targets. The possibility of bringing in domestic and international banks exists to see how they might provide financing for further investment in solar PV systems for forest villagers only if the current commercial interest rate of averagely 40% is lowered in the near future. This may include DenizBank, Sekerbank, Halkbank, Ziraat Bankası and EBRD.

Additionally, the TE IC is expected to conduct field missions to sites in *Ilgın, Konya for land-based PV systems, and Akyurt, Ankara for rooftop applications* in addition to some of the project sites in the following locations if required:

Land Based PV System locations

- Ilgın, Konya – Land Based PV System
- Şuhut, Afyonkarahisar – Land Based PV System

Roof-Top PV Systems Locations:

- Göynük, Bolu
- Feke, Adana
- Pozantı, Adana
- Dinar, Afyonkarahisar
- Gecek, Çorum
- İskilip, Çorum
- Kızılcahamam, Ankara

- Nallıhan, Ankara
- Akyurt, Ankara
- Korkuteli, Antalya
- Yusufeli, Artvin
- Ulus, Bartın
- Erdek, Balıkesir
- İvindi, Balıkesir
- Gölpazarı, Bilecik
- Yenice, Çanakkale
- Acıpayam, Denizli
- Lalapaşa, Edirne
- Karakoçan, Elazığ
- Merkez, Elazığ
- Tortum, Erzurum
- Uzundere, Erzurum
- Kelkit, Gümüşhane
- Şiran, Gümüşhane
- Merkez, Burdur
- Kiraz, İzmir
- Sarıgül, Manisa
- Merkez, Karabük
- Tosya, Kastamonu
- Sarıveliler, Karaman
- Lüleburgaz, Kırklareli
- Derbent, Konya
- Doğanhisar, Konya
- Hüyük Konya
- Beyşehir, Konya
- Develi, Kayseri
- Milas, Muğla
- Çekerek, Yozgat
- Ereğli, Zonguldak
- Merkez, Karaman
- Onikişubat, Kahramanmaraş
- Asarcık, Samsun
- Bozova, Şanlıurfa
- Saray, Tekirdağ
- Merkez, Tokat
- Maçka, Trabzon

Evaluation should employ a combination of qualitative and quantitative evaluation methods and instruments. The evaluator is expected to follow a participatory and consultative approach that ensures close engagement with the evaluation managers, implementing partners and male and female direct beneficiaries. Suggested methodological tools and approaches may include:

- **Document review.** This would include a review of all relevant documentation, inter alia
 - o Project document (contribution agreement).
 - o Theory of change and results framework.
 - o Programme and project quality assurance reports.

- o Annual workplans.
- o Activity designs.
- o Consolidated quarterly and annual reports. o Results-oriented monitoring report.
- o Highlights of project board meetings.
- o Technical/financial monitoring reports.
- **Interviews and meetings** with key stakeholders (men and women) such as key government counterparts, donor community members, representatives of key civil society organizations, United Nations country team (UNCT) members and implementing partners:
 - o **Semi-structured interviews**, based on questions designed for different stakeholders based on evaluation questions around relevance, coherence, effectiveness, efficiency, and sustainability.
 - o Key informant and **focus group discussions** with men and women, beneficiaries and stakeholders.
 - o All interviews with men and women should be undertaken in full confidence and anonymity. The final evaluation report should not assign specific comments to individuals.
- **Surveys and questionnaires** including male and female participants in development programmes, UNCT members and/or surveys and questionnaires to other stakeholders at strategic and programmatic levels.
- **Field visits** and on-site validation of key tangible outputs and interventions.
- **Other methods** such as outcome mapping, observational visits, group discussions, etc.
- **Data review and analysis** of monitoring and other data sources and methods. To ensure maximum validity, reliability of data (quality) and promote use, the evaluator will ensure triangulation of the various data sources.
- **Gender and human rights lens.** All evaluation products need to address gender, disability, and human right issues.

The specific design and methodology for the TE should emerge from consultations between the TE IC and the above-mentioned parties regarding what is appropriate and feasible for meeting the TE purpose and objectives and answering the evaluation questions, given limitations of budget, time and data. The TE IC must use gender-responsive methodologies and tools and ensure that gender equality and women's empowerment, as well as other cross-cutting issues and SDGs are incorporated into the TE report.

The final methodological approach including interview schedule, field visits and data to be used in the evaluation must be clearly outlined in the TE Inception Report and be fully discussed and agreed between UNDP, stakeholders and the TE IC.

The final report must describe the full TE approach taken and the rationale for the approach making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the evaluation.

Gender and Human Rights-Based Approach

As part of the requirement, evaluation must include an assessment of the extent to which the design, implementation, and results of the project have incorporated gender equality perspective and rights-based approach. The Individual Consultant is requested to review UNEG's Guidance in Integrating Human Rights and Gender Equality in Evaluation during the inception phase.

In addition, the methodology used in the final evaluation, including data collection and analysis methods should be human rights- and gender-sensitive to the greatest extent possible, with evaluation data and findings disaggregated by sex, ethnicity, age, etc. Detailed analysis on disaggregated data will be undertaken as part of

final evaluation from which findings are consolidated to make recommendations and identify lessons learned for enhanced gender responsive and rights-based approach of the Project.

5. DETAILED SCOPE OF THE TE AND EVALUATION CRITERIA

The TE will assess project performance against expectations set out in the project's Logical Framework/Results Framework (see ToR Annex A). The TE will assess results according to the criteria outlined in the [Guidance for TEs of UNDP-supported GEF-financed Projects](#).

The Findings section of the TE report will cover the topics listed below. A full outline of the TE report's content is provided in ToR Annex C.

The asterisk “(*)” indicates criteria for which a rating is required.

Findings

i. Project Design/Formulation

- National priorities and country driven-ness
- Theory of Change
- Gender equality and women's empowerment
- Social and Environmental Standards (Safeguards)
- Analysis of Results Framework: project logic and strategy, indicators
- Assumptions and Risks
- Lessons from other relevant projects (e.g. same focal area) incorporated into project design
- Planned stakeholder participation
- Linkages between project and other interventions within the sector
- Management arrangements

ii. Project Implementation

- Adaptive management (changes to the project design and project outputs during implementation)
- Actual stakeholder participation and partnership arrangements
- Project Finance and Co-finance
- Monitoring & Evaluation: design at entry (*), implementation (*), and overall assessment of M&E (*)
- Implementing Agency (UNDP) (*) and Executing Agency (*), overall project oversight/implementation and execution (*)
- Risk Management, including Social and Environmental Standards (Safeguards)

iii. Project Results

- Assess the achievement of outcomes against indicators by reporting on the level of progress for each objective and outcome indicator at the time of the TE and noting final achievements
- Relevance (*), Effectiveness (*), Efficiency (*) and overall project outcome (*)
- Sustainability: financial (*), socio-political (*), institutional framework and governance (*), environmental (*), overall likelihood of sustainability (*)
- Country ownership
- Gender equality and women's empowerment

- Cross-cutting issues (poverty alleviation, improved governance, climate change mitigation and adaptation, disaster prevention and recovery, human rights, capacity development, South-South cooperation, knowledge management, volunteerism, etc., as relevant)
- GEF Additionality
- Catalytic Role / Replication Effect
- Progress to impact

Main Findings, Conclusions, Recommendations and Lessons Learned

- The TE IC will include a summary of the main findings of the TE report. Findings should be presented as statements of fact that are based on analysis of the data.
- The section on conclusions will be written in light of the findings. Conclusions should be comprehensive and balanced statements that are well substantiated by evidence and logically connected to the TE findings. They should highlight the strengths, weaknesses and results of the project, respond to key evaluation questions and provide insights into the identification of and/or solutions to important problems or issues pertinent to project beneficiaries, UNDP and the GEF, including issues in relation to gender equality and women's empowerment.
- Recommendations should provide concrete, practical, feasible and targeted recommendations directed to the intended users of the evaluation about what actions to take and decisions to make. The recommendations should be specifically supported by the evidence and linked to the findings and conclusions around key questions addressed by the evaluation.
- The TE report should also include lessons that can be taken from the evaluation, including best practices in addressing issues relating to relevance, performance and success that can provide knowledge gained from the particular circumstance (programmatic and evaluation methods used, partnerships, financial leveraging, etc.) that are applicable to other GEF and UNDP interventions. When possible, the TE IC should include examples of good practices in project design and implementation.
- It is important for the conclusions, recommendations and lessons learned of the TE report to incorporate gender equality and empowerment of women.

The TE report will include an Evaluation Ratings Table, as shown below:

ToR Table 2: Evaluation Ratings Table for ORKÖY-PV Project

Monitoring & Evaluation (M&E)	Rating ¹
M&E design at entry	
M&E Plan Implementation	
Overall Quality of M&E	
Implementation & Execution	Rating
Quality of UNDP Implementation/Oversight	
Quality of Implementing Partner Execution	
Overall quality of Implementation/Execution	
Assessment of Outcomes	Rating

¹ Outcomes, Effectiveness, Efficiency, M&E, Implementation/Oversight & Execution, Relevance are rated on a 6-point scale: 6=Highly Satisfactory (HS), 5=Satisfactory (S), 4=Moderately Satisfactory (MS), 3=Moderately Unsatisfactory (MU), 2=Unsatisfactory (U), 1=Highly Unsatisfactory (HU). Sustainability is rated on a 4-point scale: 4=Likely (L), 3=Moderately Likely (ML), 2=Moderately Unlikely (MU), 1=Unlikely (U)

Relevance	
Effectiveness	
Efficiency	
Overall Project Outcome Rating	
Sustainability	Rating
Financial resources	
Socio-political/economic	
Institutional framework and governance	
Environmental	
Overall Likelihood of Sustainability	

Considering the evaluation parameters, the TE IC is expected to analyze data and share his/her findings, conclusions and recommendations generated by this analysis. As a reference point for the evaluation, the TE IC is provided with indicative evaluation questions in Annex D, which are expected to be amended, elaborated and submitted in the TE Inception Report in line with the categorization within the above Evaluation Ratings Table and shall be included as an annex to the final version of the evaluation report.

6. TIMEFRAME

The total duration of the TE will be approximately 30 working days (including travel days). The tentative TE timeframe is as follows:

Timeframe	Activity
20 June 2022	Submission of Deployment Request to GPN/ExpRes Roster
4 July 2022	Selection of TE IC
10 July 2022	Preparation period for TE IC (kick-off meeting and handover of documentation)
24 July 2022 (14 calendar days)	Document review and preparation of TE Inception Report
7 August 2022 (14 calendar days)	Finalization and Validation of TE Inception Report; latest start of TE mission
21 August 2022 (14 calendar days)	TE mission: stakeholder meetings, interviews, field visits, etc.
24 August 2022	Mission wrap-up meeting & presentation of initial findings; earliest end of TE mission
9 September 2022 (16 calendar days)	Preparation of draft TE report
30 September 2022	Circulation of draft TE report for comments
14 October 2022	Incorporation of comments on draft TE report into Audit Trail & finalization of TE report
17 October 2022	Presentation of the final TE Report and Recommendations
14 October 2022	Expected date of full TE completion
31 October 2022	Preparation and Issuance of Management Response

Options for site visits should be provided in the TE Inception Report.

7. TE DELIVERABLES

#	Deliverable	Due Date	Review and Approvals Required
1	Final TE Inception Report	7 August 2022	Reviewed and approved by M&E Analyst in consultation with the CCE Portfolio Manager
2	Draft TE Report	9 September 2022	Reviewed and approved by M&E Analyst, in consultation with the CCE Portfolio Manager and reviewed by RTA
3	Final TE Report* + Audit Trail	14 October 2022	Reviewed and approved by M&E Analyst in consultation with the CCE Portfolio Manager
4	Presentation	17 October 2022	Reviewed and approved by M&E Analyst in consultation with the CCE Portfolio Manager

*All final TE reports will be quality assessed by the UNDP Independent Evaluation Office (IEO). Details of the IEO's quality assessment of decentralized evaluations can be found in Section 6 of the UNDP Evaluation Guidelines.²

8. TE ARRANGEMENTS, GOVERNANCE AND ACCOUNTABILITY

The principal responsibility for managing the TE resides with UNDP. UNDP will contract the IC and ensure the timely provision of per diems and travel arrangements within the country for the IC. The Project Team will be responsible for liaising with the TE IC to provide all relevant documents, set up stakeholder interviews, and arrange field visits.

UNDP will provide the IC all relevant background documents. Neither UNDP nor any of the project partners are required to provide any physical facility for the work of the Consultant.

The IC shall report to the Monitoring and Evaluation Analyst. The IC shall conduct the TE in collaboration with Portfolio Manager and Monitoring & Evaluation Officer of CCE Portfolio at UNDP.

The principal responsibility for managing this evaluation lies with UNDP. UNDP will assign a facilitator to set up the stakeholder interviews, arrange the field visits, coordinate with the GDF and provide translation (when necessary).

In preparation for the evaluation mission, which would last for 30 working days (including travel days), Project Manager, with assistance of CCE portfolio M&E officer, will provide the necessary documentation for the TE IC who will review the baseline and midterm GEF focal area Core Indicators/Tracking Tools submitted to the GEF at the CEO endorsement and midterm stages and the terminal Core Indicators/Tracking Tools that must be completed before the TE field mission begins.

These Terms of Reference follow the UNDP-GEF policies and procedures.

The TE IC shall be responsible to the Evaluation Manager (in this case UNDP's Monitoring and Evaluation Analyst) for the completion of the tasks and duties assigned throughout these Terms of Reference. All the

² Access at: <http://web.undp.org/evaluation/guideline/section-6.shtml>

reports are subject to approval from Evaluation Manager, for the payments to be affected to the Individual Consultant.

The following are the key actors involved in the implementation of this TE:

1. Evaluation Manager

This role will be conducted by the **Monitoring and Evaluation Analyst of UNDP** who will have the following functions:

- Supervise the evaluation process throughout the main phases of the evaluation (preparation of the ToR, implementation and management and use of the evaluation)
- Participate in the selection and recruitment of the Individual Consultant
- Provide the TE IC with administrative support and required data and documentation
- Ensure the evaluation deliverables meet the required quality
- Safeguard the independence of the exercise, including the selection of the Individual Consultant
- Review the Inception Report, Draft TE Report and Final TE Report and give necessary approvals on behalf of UNDP
- Collect and consolidate comments on draft evaluation reports and share with the evaluation consultant for finalization of the evaluation report
- Contribute to the development of management responses and key actions to all recommendations addressed to UNDP
- Ensure evaluation Terms of Reference, final TE reports, management responses are publicly available through Evaluation Resource Center within the specified timeframe
- Facilitate, monitor and report on implementation of management responses on a periodic basis

2. Climate Change and Environment Portfolio Manager will have the following functions:

- Establish the Evaluation Reference Group with key project partners when needed
- Ensure and safeguard the independence of the evaluation
- Provide comments and clarifications on the Terms of Reference, Draft TE Inception Report and Draft TE Report
- Ensure the Individual Consultant's access to all information, data and documentation relevant to the intervention, as well as to key actors and informants who are expected to participate in interviews, focus groups or other information-gathering methods
- Respond to evaluation recommendations by providing management responses and key actions
- Ensure dissemination of the evaluation report to key stakeholders
- Be responsible for implementation of key actions of the management response

3. TE Individual Consultant will be responsible for the overall coordination and quality of all the deliverables to be produced. It is the Individual Consultant who will be held accountable to UNDP in the quality of the final product. The Individual Consultant will conduct the evaluation study by fulfilling their contractual duties and responsibilities in line with this ToR, United Nations Evaluation Group (UNEG) norms and standards and ethical guidelines. This includes submission of all deliverables stipulated under Section 12 (Payment Schedule) of this ToR, to the satisfaction of UNDP. Individual Consultant's functions do not include any managerial, supervisory and/or representative functions in UNDP, end beneficiaries and implementing partners. All documents and data provided to the Individual Consultant are confidential and cannot be used for any other purpose or shared with a third party without any written approval from UNDP. There will be only one IC conducting the Terminal Evaluation for this project. The IC shall not have participated in the project preparation, formulation, and/or implementation (including the writing of the Project Document) and should not have a conflict of interest with project's related activities. The scope of work for the Individual Consultant of this evaluation will include but not be limited to:

- To develop and finalize the TE inception report that will include elaboration of how each evaluation question will be answered along with proposed methods, proposed sources of data, and data collection and analysis procedures;
- To design the tools and data collection;
- To conduct data collection, analysis and interpretation;
- To develop the draft evaluation report;
- To finalize the evaluation report;
- To present findings and debrief;
- To plan, execute and report, kickoff and feedback meetings and debriefings;
- To ensure compliance with the ToR of the TE for ORKÖY-PV Project; and
- To utilize best practice evaluation methodologies.

The IC shall avoid any kind of discriminatory behavior including gender discrimination and ensure that

- human rights and gender equality is prioritized as an ethical principle within all actions;
- activities are designed and implemented in accordance with "Social and Environmental Standards of UNDP";
- any kind of diversities based on ethnicity, age, sexual orientation, disability, religion, class, gender are respected within all implementations including data production;
- differentiated needs of women and men are considered;
- inclusive approach is reflected within all actions and implementations, in that sense an enabling and accessible setup in various senses such as disability gender language barrier is created;
- necessary arrangements to provide gender parity within all committees, meetings, trainings etc. introduced.

4. Evaluation Reference Group: Ministry of Agriculture and Forestry, General Directorate of Forestry will function as the Evaluation Reference Group. This Group is composed of the representatives of the major stakeholders involved in decision making in the Project and will review and provide advice on the quality of the evaluation process, as well as on the evaluation products (more specifically comments and suggestions on the draft report and final report) and options for improvement.

UNDP will assist the IC with below services;

- Provide support in collection of background materials;
- Participation in debriefings with UNDP CO and GDF representatives;
- Organize the mission program together with the Project Management Unit, arrange and facilitate meetings with key stakeholders;
- Assistance to the IC in conducting interviews with relevant stakeholders and provide translation during the interviews when necessary;
- Participation in debriefing with UNDP and project partners;
- Necessary support will be provided to IC in circulation of the draft TE report among the key project stakeholders for review and commenting.

Reporting Line

The Individual Consultant will be responsible to the Evaluation Manager (in this case UNDP's Monitoring and Evaluation Analyst) for the completion of the tasks and duties assigned throughout this Terms of Reference. All the reports are subject to approval from Evaluation Manager, for the payments to be affected to the Individual Consultant.

Reporting Language and Conditions

The reporting language shall be in English. All information should be provided in electronic version in word format. The Individual Consultant shall be solely liable for the accuracy and reliability of the data provided, along with links to sources of information used.

Title Rights

The title rights, copyrights and all other rights whatsoever nature in any material produced under the provisions of these TORs will be vested exclusively in UNDP.

9. DUTY STATION AND EXPECTED DURATION OF THE ASSIGNMENT

Duty Station for the assignment is home-based. The Individual Consultant will be requested to travel to provinces where the Project is being implemented, as indicated in the expected interview schedule table below. All the costs associated with travel, accommodation and any other living costs shall be borne by UNDP, therefore should not be included in the price proposal of the TE IC. UNDP will arrange economy class roundtrip flight tickets through its contracted Travel Agency.

Assignment-related travel and accommodation costs outside of the Duty Station, which are pre-approved by UNDP, will be borne by UNDP in line with UNDP's corporate rules and regulations. The costs of these missions may either be;

- Arranged and covered by UNDP CO from the respective project budget without making any reimbursements to the Consultant, through UNDP's official Travel Agency or,
- Reimbursed to the Consultant upon the submission of the receipts/invoices of the expenses by the Consultants and approval of the UNDP. The reimbursement of each cost item is subject to the following constraints/conditions provided in below table or,
- Covered by the combination of both options.

The following guidance on travel compensation is provided as per UNDP practice:

Cost item	Constraints	Conditions of Reimbursement
Travel (intercity transportation)	Full-fare economy class tickets	1- Approval by UNDP of the cost items before the initiation of travel 2- Submission of the invoices/receipt, etc. by the Consultant with the UNDP's F-10 Form 3- Acceptance and approval by UNDP of the invoices and F-10 Form.
Accommodation	Up to 50% of the effective DSA rate of UNDP for the respective location	
Breakfast	Up to 6% of the effective DSA rate of UNDP for the respective location	
Lunch	Up to 12% of the effective DSA rate of UNDP for the respective location	
Dinner	Up to 12% of the effective DSA rate of UNDP for the location	
Other Expenses (intra city transportations, transfer cost from /to terminals, etc.)	Up to 20% of effective DSA rate of UNDP for the respective location	

As per UNDSS rules, the IC is responsible for completing necessary online security trainings and submitting certificates and travel clearance prior to assignment-related travels.

"Interviews" referred in this Terms of Reference comprises such telecommuting and online conferencing tools as well. All travel arrangements shall be subject to pre-approval of the UNDP.

Travel:

- International travel will be required to Turkey during the TE mission;
- The BSAFE course must be successfully completed prior to commencement of travel;
- Individual Consultants are responsible for ensuring they have vaccinations/inoculations when travelling to certain countries, as designated by the UN Medical Director.
- Consultants are required to comply with the UN security directives set forth under: <https://dss.un.org/dssweb/>
- All related travel expenses will be covered and will be reimbursed as per UNDP rules and regulations upon submission of an F-10 claim form and supporting documents.

Expected Interview Schedule

Partners/Stakeholder(s) to be Interviewed	Location ³	Estimated Day(s) of Interview	Method
UNDP	Ankara, Turkey	1	In person
MoAF/GDF	Ankara, Turkey	1	In person
MoEUCC	Ankara, Turkey	0.2	Remote or in person
MoENR	Ankara, Turkey	0.5	Remote or in person
EPDK	Ankara, Turkey	0.2	Remote or in person
TEDAS	Ankara, Turkey	0.2	Remote or in person
Electricity Distribution Companies (Utilities)	Ankara, Turkey	0.2	Remote or in person
Renewable Energy Cooperative	Konya, Turkey	0.5	In person
GUNDER	Ankara, Turkey	0.5	In person
Sample beneficiaries (Forest Villagers)	Ankara, Turkey	0.5	In person
Sample contractors (Solar PV suppliers)	Ankara, Turkey	0.5	Remote or in person
ESTIMATED TOTAL		5.3	

*COVID-19 Specific Measures:

The Individual Consultant shall review all local regulations, as well as that of UN and UNDP concerning the measures, he/she must take during performance of the contract in the context of COVID-19. The Individual Consultant shall take all measures against COVID-19 imposed by local regulations, as well as by UN and UNDP during performance of the contract to protect his/her health and social rights, as well as UNDP personnel, Project Stakeholders and third parties. UNDP shall not be held accountable for any COVID-19 related health risks or events that are caused by negligence of the Individual Consultant and/or any other third party.

The contract is expected to start on 04/07/2022 (starting date is indicative and may be updated considering actual contract signature date) and expire on 15/12/2022.

10. REQUIRED QUALIFICATIONS

An Individual Consultant will conduct the TE and will be responsible for the duties outlined in the above sections regarding the design and writing of the TE report.

The evaluator cannot have participated in the project preparation, formulation and/or implementation (including the writing of the project document), must not have conducted this project's Mid-Term Review and should not have a conflict of interest with the project's related activities.

³ The locations of partners and stakeholders do not rule out the probability of a remote monitoring mission. The names of cities are there to inform the reader about the location of stakeholders and do not mean that the Individual Consultant must pay an in-person field visit to each city indicated in this list.

	Minimum Qualification Requirements	Assets
General Qualifications	<ul style="list-style-type: none"> At least a Master's Degree in environmental studies, economics, international relations, engineering, development studies or any other relevant field. (5 points) 	<ul style="list-style-type: none"> Ph.D. Degree in environmental studies, economics, international relations, engineering, development studies or any other relevant field. (5 points)
General Professional Experience	<ul style="list-style-type: none"> Minimum 7 years of overall professional experience in research design, field work, qualitative, quantitative, and mixed-method research strategies, including but not limited to focus groups, surveys and interview techniques. (15 points) 	<ul style="list-style-type: none"> Project monitoring or implementation experience in UN agencies (10 pts)
Specific Professional Experience	<ul style="list-style-type: none"> Minimum 7 years of professional international experience in conducting and managing evaluations, assessments, research or review of development projects, programmes or thematic areas either as team leader, sole evaluator or as a team member. (15 points) Experience in evaluation of renewable energy, sustainable finance, environment or climate change projects, programmes or thematic areas either as team leader or sole evaluator. (15 points) 	<ul style="list-style-type: none"> Having conducted 3 to 5 evaluations, assessments, research or review of renewable energy projects, programmes or thematic areas either as team leader or sole evaluator. (10 points) Relevant experience in Turkey or RBEC⁴ region. (10 points) Experience in evaluation of GEF financed programmes or projects (15 points)

⁴ UNDP Regional Bureau for Europe and the Commonwealth of Independent States (RBEC).

	Minimum Qualification Requirements	Assets
<p><u>Notes:</u></p> <ul style="list-style-type: none"> • Internships (paid/unpaid) are not considered professional experience. • Obligatory military service is not considered professional experience. • Professional experience gained in an international setting is considered international experience. • Experience gained prior to completion of undergraduate studies is not considered professional experience. 		

UNDP is committed to achieving workforce diversity in terms of gender, race, ethnicity, indigenous identity, disability and culture. Individuals from all genders, minority groups, indigenous groups and persons with disabilities are equally encouraged to apply. All applications will be treated with utmost confidentiality.

11. EVALUATOR ETHICS

The TE IC will be held to the highest ethical standards and is required to sign a code of conduct upon acceptance of the assignment. This evaluation will be conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluation'. The evaluator must safeguard the rights and confidentiality of information providers, interviewees and stakeholders through measures to ensure compliance with legal and other relevant codes governing collection of data and reporting on data. The evaluator must also ensure security of collected information before and after the evaluation and protocols to ensure anonymity and confidentiality of sources of information where that is expected. The information knowledge and data gathered in the evaluation process must also be solely used for the evaluation and not for other uses without the express authorization of UNDP and partners.

12. PAYMENT SCHEDULE

Contracting Authority

Contracting Authority for this Assignment is UNDP, and the contract amount will be provided through the respective project budget.

Contracting Modality

IC – Individual Contract of UNDP.

Payment Schedule

Payments will be made within 30 days upon acceptance and approval of the corresponding deliverable by UNDP on a lump-sum basis indicated below and the pertaining Certification of Payment document signed by the IC and approved by the Monitoring and Evaluation Analyst, in consultation with the CCE Portfolio Manager.

- 10% payment upon satisfactory delivery of the final TE Inception Report and approval by UNDP
- 80% payment upon satisfactory delivery of the final TE report and approval by UNDP and RTA (via signatures on the TE Report Clearance Form) and delivery of completed TE Audit Trail
- 10% payment upon satisfactory presentation/de-briefing of evaluation report findings.

Criteria for issuing the payment of 80% for Final TE Report⁵:

- The final TE report includes all requirements outlined in the TE TOR and is in accordance with the TE guidance.
- The final TE report is clearly written, logically organized, and is specific for this project (i.e. text has not been cut & pasted from other TE reports).
- The Audit Trail includes responses to and justification for each comment listed.

The IC shall be paid in USD if he/she resides in a country different than Turkey. If he/she resides in Turkey, the payment shall be realized in TL through conversion of the USD amount by the official UN exchange rate valid on the date of money transfer.

If the deliverables are not produced and delivered by the IC in due time and to the satisfaction of UNDP, no payment will be made even if the IC has invested time to produce and deliver such deliverables. Expected delivery dates of the reports will be finalized by UNDP during the Briefing Meeting that will be conducted upon contract signature.

The amount paid to the IC shall be gross and inclusive of all associated costs such as social security, pension and income tax etc. The amount to be paid to the Individual Consultant is fixed regardless of changes in the cost components. The price proposal amount should be indicated in gross terms and hence should be inclusive of costs related to tax, social security premium, pension, visa (if needed), etc. UNDP will not make any further clarification on costs related to tax, social security premium, pension, visa, etc. It is the Individual Consultant's responsibility to make necessary inquiries on these matters.

Tax Obligations: The IC is solely responsible for all taxation or other assessments on any income derived from UNDP. UNDP will not make any withholding from payments for the purposes of income tax. UNDP is exempt from any liabilities regarding taxation and will not reimburse any such taxation to the IC.

TOR ANNEXES

- ToR Annex A: Project Logical/Results Framework
- ToR Annex B: Project Information Package to be reviewed by TE IC
- ToR Annex C: Content of the TE report
- ToR Annex D: Evaluation Criteria Matrix template
- ToR Annex E: UNEG Code of Conduct for Evaluators

⁵ UNDP is obligated to issue payments to the TE IC as soon as the terms under the ToR are fulfilled. If there is an ongoing discussion regarding the quality and completeness of the final deliverables that cannot be resolved between the UNDP and the TE IC, the Regional M&E Advisor and Vertical Fund Directorate will be consulted. If needed, the UNDP's senior management, Procurement Services Unit and Legal Support Office will be notified as well so that a decision can be made about whether or not to withhold payment of any amounts that may be due to the evaluator(s), suspend or terminate the contract and/or remove the individual contractor from any applicable rosters. See the UNDP Individual Contract Policy for further details:

https://popp.undp.org/layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PSU_Individual%20Contract_Individual%20Contract%20Policy.docx&action=default

- ToR Annex F: TE Rating Scales
- ToR Annex G: TE Report Clearance Form
- ToR Annex H: TE Audit Trail

ToR Annex A: Project Logical/Results Framework

This project will contribute to achieving the following Country Programme Outcome as defined in the 2011 – 2015 CPD for Turkey						
Outcome 3: Strengthening policy formulation and implementation capacity for the protection of the environment, and cultural heritage in line with sustainable development principles and taking into consideration climate change and disaster management						
Country Programme Outcome Indicators: Reductions in the level greenhouse gas emissions.						
Primary applicable Key Environment and Sustainable Development Key Result Area (same as that on the cover page, circle one): 1. Mainstreaming environment and energy, and 4. Expanding access to environmental and energy services for the poor.						
Applicable GEF Strategic Objective and Program: Climate change objective3: To promote investment in renewable energy technologies						
Applicable GEF Expected Outcomes: 3a Appropriate policy, legal and regulatory frameworks adopted and enforced; 3b Sustainable financing mechanisms established and operational; 3c GHG emissions avoided.						
Applicable GEF Outcome Indicators: 3a Extent to which EE policies and regulations are adopted and enforced; 3b Volume of investment mobilized; 3c Avoided GHG emissions from on-grid PV electricity generation (tons CO ₂ /MWh); and \$/t CO ₂ .						

	Strategy	Indicators	Baseline	Target	Sources and means of verification	Risk and Assumptions
Overall Objective /Impact	To support the successful launching of a sustainable energy financing mechanism within the ORKOY credit mechanism to ensure that there is at least 30 MW of installed capacity of grid-connected, residential solar PV in forest villages in Turkey (approximately 2.5% or 175,000 people living in forest villages will have their electricity needs met by solar PV) by the end of the project	Amount of reduced CO2 emissions from the power sector (compared to the project baseline) by end of project, tons CO2eq	0	28.750	Project's annual reports, GHG monitoring and verification reports	Continued commitment of project partners, including Government agencies and investors / developers
		Cumulative installed capacity of grid-connected PV systems (kWp)	0	30.000	Project final evaluation report Post project market monitoring and evaluations	Unexpected rise in cost of solar PV during remaining period of implementation, increasing reluctance of forest villagers to invest with ORKÖY's SFM 1.5 work positions per project (maintenance, security)

	Strategy	Indicators	Baseline	Target	Sources and means of verification	Risk and Assumptions
		Cumulative total electricity generation from installed grid-connected PV systems (kWh/year)	0	47.520.000	Annual reports from forest cooperatives	
		Cumulative number of created job positions for forest villagers related to solar pv	0	450		
		Number of people living in forest villages who will have their electricity needs met by solar PV	0	175.000		
Component 1: Policy & Institutional Framework for supporting Sustainable energy financing mechanism for solar power in forest villages						
Specific Objective /Outcome 1	Enhanced enabling policy and environment, within which ORKOY’s sustainable energy financing	• SEFM unit appointed, introduced and confirmed by ORKOY	None	5 months after project start	Published documents. Projects annual reports.	Unchanged commitment of ORKOY and relevant stakeholders (utilities, government).

	Strategy	Indicators	Baseline	Target	Sources and means of verification	Risk and Assumptions
	mechanism continues to operate beyond the lifetime of the project	National Framework published and approved	None	Published before end of 2019		Unchanged legislative framework.
		Technical report developed and published	0	Published 7 months after project start		
Output/Expected Result 1.1	Evaluation and selection of public-private business models (ORKOY, solar PV installers, utilities, domestic banks) for provision of affordable, grid-connected residential solar PV to forest villagers, using an individual household and/or cooperative model.	• Completed and published Evaluation report by Year 1 (building on the initial detailed analysis of various business models prepared and developed during the PPG stage)	None	ER by late 2019	Published ER	Unchanged commitment of relevant stakeholders (ORKOY, utilities, installers, banks)
Output/Expected Result 1.2	Terms of Reference for ORKOY's Credit Programme are revised, agreed, published and disseminated	Completed and published TOR by Year 1	None	Published ToR before the end of 2019	Published TOR before end of 2019	Unchanged commitment of relevant stakeholders (ORKOY, utilities, installers, banks)
		No. of dissemination events for stakeholders	None	At least 5	Lists of participants, official publications, media reports	

	Strategy	Indicators	Baseline	Target	Sources and means of verification	Risk and Assumptions
Output/Expected Result 1.3	Sustainable energy Financing unit established within ORKOY with dedicated full time staff	No. of full time staff appointed	0	At least 2	Project's annual reports	Unchanged commitment of ORKOY
		SEFM unit appointed, introduced and confirmed by ORKOY	No SEFM Unit	Unit appointed 5 months after project start	ORKOY's official announcement	
Output/Expected Result 1.4	Model contract for ORKOY soft loan developed and utilized	Model contract published and approved by ORKOY	None	Published before end of 2019	Model contract published	Unchanged commitment of ORKOY
Output/Expected Result 1.5	National Framework designed and operationalized to use Turkey's feed-In-Tariff scheme for the purpose of residential solar PV for forest villagers.	National Framework published and approved	None	Framework approved by end of 2019	Published framework	Unchanged commitment of ORKOY and relevant stakeholders (utilities, government).
Output/Expected Result 1.6	Technical report on grid capacity and requirements to enable feed-in of grid-connected PV and to define technical information for the national grid code.	Technical report developed and published	None	Technical report published 7 months after project start	Published report	Unchanged commitment of ORKOY and relevant stakeholders (utilities, government).
Output/Expected Result 1.7	Reports on results of recently introduced and piloted net metering published and disseminated	Net metering pilot results published	0	Results published by end of 2019	Published methodology	Unchanged commitment of ORKOY and relevant stakeholders (utilities, government).

	Strategy	Indicators	Baseline	Target	Sources and means of verification	Risk and Assumptions
		Number of dissemination events	0	2	Lists of participants, official publications, media reports, press releases	Unchanged legislative framework.
Component 2: Solar PV demonstration Projects						
Specific Objective /Outcome 2	Sustainable Energy Financing Mechanism	No. of land-based solar PV plant projects (each 100 kW) implemented	0	2	"Project documents Approvals from competent bodies	Unchanged commitment of ORKOY and interest of forest villages
		No. of household rooftops where solar PV installed	0	200	Press releases "	
		Total installed capacity of the projects (kWp)	0	600		
		Number of villages where pilot solar PV are being installed	0	19		
Output/Expected Result 2.1	Business plans & feasibility studies prepared for land-based solar PV installation and for rooftop based demonstration projects in forest villages	No. of project reports prepared and approved	0	2	Published documents	
Output/Expected Result 2.3	Case Studies on each of the Demonstration Projects	No. of case studies prepared	0	2	Published case studies	Unchanged commitment of ORKOY and interest of forest villages.

	Strategy	Indicators	Baseline	Target	Sources and means of verification	Risk and Assumptions
Output/Expected Result 2.4	Short video documentary on the demonstration projects	No. of video spots published by EOP	0	1	Published video spots	Successful implementation of demonstration projects.
Component 3: Replication and scaling up – Enhancement of the sustainable energy financing mechanism						
Specific Objective /Outcome 3.1	Sustainable Energy Financing Mechanism of ORKOY successfully provides soft loans to contribute to the deployment of at least 30MW of solar PV during project lifetime	Amount of reduced CO2 emissions from the power sector (compared to the project baseline) by EOP, tons CO2eq	0	28.750	Project's annual reports, GHG monitoring and verification reports	Unchanged commitment of ORKOY and relevant stakeholders (utilities, government).
		Cumulative installed capacity of grid-connected PV systems (kWp)	0	30.000		Successful implementation of demonstration projects
		Cumulative total electricity generation from installed grid-connected PV systems (kWh/year)	0	47.520.000		Interest of other financial subjects in the program.
Output/Expected Result 3.1	National Awareness Raising Programme (NARP) for ORKOY Sustainable Energy Financing Mechanism addressing forest village end-users and cooperatives	NARP is developed	None	NARP developed by end of 2019	Published NARP document	Unchanged commitment of ORKOY and relevant stakeholders (utilities, government).

	Strategy	Indicators	Baseline	Target	Sources and means of verification	Risk and Assumptions
Specific Objective /Outcome 3.2	Sustainable Energy Financing Mechanism of ORKOY has in place systems for M&E, quality standards, and certification systems and training programmes	MRV system developed, Quality standards developed, Certification scheme implemented	None	end year 1 MRV system, quality standards and certification scheme developed in early 2020	Project's annual reports	
Output/Expected Result 3.3	National workshops held to promote the solar PV training manual targeting solar PV value chain (ORKOY officials, installers, distribution companies)	No. of dissemination events	0	12	Lists of attendance	
		No. of involved persons/entities	0	400	Press releases	
		Residential rooftop solar PV manual for ORKÖY staff	0	1		
		Workshop material for the 4 different workshops (ORKOY staff, OGM local staff, installers and distribution companies)	0	4		
Output/Expected Result 3.6	Workshops with financial sector stakeholders to consult, build	No. of events organized	0	3	Projects annual reports.	Unchanged commitment of ORKOY and relevant stakeholders (utilities, government).

	Strategy	Indicators	Baseline	Target	Sources and means of verification	Risk and Assumptions
	familiarity and support finance to residential rooftop solar PV	No. of involved institutions	0	5	Lists of attendance Press releases	Successful implementation of demonstration projects
Output/Expected Result 3.7	Project Website – Practical Guide to Investing in Residential Rooftop Solar PV in Turkey	Web site developed and updated	None	Website developed by end of 2019	Web site	Unchanged commitment of ORKOY and relevant stakeholders (utilities, government). Successful implementation of demonstration projects
Output/Expected Result 3.8	ITMO trade model setup for voluntary carbon market for residential rooftop solar PV project	The trade model developed	None	Trade model delivered by late 2021	Project's annual reports	

ToR Annex B: Project Information Package to be reviewed by TE IC

#	Item (electronic versions preferred if available)
1	Project Identification Form (PIF)
2	Final UNDP-GEF Project Document with all annexes
3	CEO Endorsement Request
4	UNDP Social and Environmental Screening Procedure (SESP) Form
5	Inception Workshop Report
6	Mid-Term Review report and management response to MTR recommendations
7	All Project Implementation Reports (PIRs)
8	Minutes of Project Board Meetings and of other meetings (i.e. Project Appraisal Committee meetings)
9	GEF Tracking Tools (from CEO Endorsement, midterm and terminal stages)
10	GEF/LDCF/SCCF Core Indicators (from PIF, CEO Endorsement, midterm and terminal stages); for GEF-6 and GEF-7 projects only
11	Financial data, including actual expenditures by project outcome, including management costs, and including documentation of any significant budget revisions
12	Co-financing data with expected and actual contributions broken down by type of co-financing, source, and whether the contribution is considered as investment mobilized or recurring expenditures
13	Audit reports (March 2019 & March 2022)
14	Electronic copies of project outputs (booklets, manuals, technical reports, articles, etc.)
15	Sample of project communications materials
16	Summary list of formal meetings, workshops, etc. held, with date, location, topic, and number of participants
17	Socio-Economic Structure of the Forest Villages: Perceptions, Needs, Opportunities and Strategies
18	List of contracts and procurement items over ~US\$5,000 (i.e. organizations or companies contracted for project outputs, etc., except in cases of confidential information)
19	List of related projects/initiatives contributing to project objectives approved/started after GEF project approval (i.e. any leveraged or “catalytic” results)
20	Data on relevant project website activity – e.g. number of unique visitors per month, number of page views, etc. over relevant time period, if available
21	UNDP Country Programme Document (CPD)
22	List/ map of project sites, highlighting suggested visits
23	List and contact details for project staff, key project stakeholders, including Project Board members, RTA, Project Team members, and other partners to be consulted
24	Project deliverables that provide documentary evidence of achievement towards project outcomes
	<i>Additional documents, as required</i>

ToR Annex C: Content of the TE report

- i. Title page
 - Title of UNDP-supported GEF-financed project
 - UNDP PIMS ID and GEF ID
 - TE timeframe and date of final TE report
 - Region and countries included in the project
 - GEF Focal Area/Strategic Program
 - Executing Agency, Implementing partner and other project partners
 - TE IC
- ii. Acknowledgements
- iii. Table of Contents
- iv. Acronyms and Abbreviations
1. Executive Summary (3-4 pages)
 - Project Information Table
 - Project Description (brief)
 - Evaluation Ratings Table
 - Concise summary of findings, conclusions and lessons learned
 - Recommendations summary table
2. Introduction (2-3 pages)
 - Purpose and objective of the TE
 - Scope
 - Methodology
 - Data Collection & Analysis
 - Ethics
 - Limitations to the evaluation
 - Structure of the TE report
3. Project Description (3-5 pages)
 - Project start and duration, including milestones
 - Development context: environmental, socio-economic, institutional, and policy factors relevant to the project objective and scope
 - Problems that the project sought to address, threats and barriers targeted
 - Immediate and development objectives of the project
 - Expected results
 - Main stakeholders: summary list
 - Theory of Change
4. Findings
(in addition to a descriptive assessment, all criteria marked with (*) must be given a rating⁶)
 - 4.1 Project Design/Formulation
 - Analysis of Results Framework: project logic and strategy, indicators
 - Assumptions and Risks
 - Lessons from other relevant projects (e.g. same focal area) incorporated into project design
 - Planned stakeholder participation
 - Linkages between project and other interventions within the sector

⁶ See ToR Annex F for rating scales.

4.1 Project Implementation

- Adaptive management (changes to the project design and project outputs during implementation)
- Actual stakeholder participation and partnership arrangements
- Project Finance and Co-finance
- Monitoring & Evaluation: design at entry (*), implementation (*), and overall assessment of M&E (*)
- UNDP implementation/oversight (*) and Implementing Partner execution (*), overall project implementation/execution (*), coordination, and operational issues
- Risk Management, including Social and Environmental Standards (Safeguards)

4.2 Project Results and Impacts

- Progress towards objective and expected outcomes (*)
- Relevance (*)
- Effectiveness (*)
- Efficiency (*)
- Overall Outcome (*)
- Sustainability: financial (*), socio-economic (*), institutional framework and governance (*), environmental (*), and overall likelihood (*)
- Country ownership
- Gender equality and women's empowerment
- Cross-cutting Issues
- GEF Additionality
- Catalytic/Replication Effect
- Progress to Impact

5. Main Findings, Conclusions, Recommendations & Lessons

- Main Findings
- Conclusions
- Recommendations
- Lessons Learned

6. Annexes

- TE ToR (excluding ToR annexes)
- TE Mission itinerary, including summary of field visits
- List of persons interviewed
- List of documents reviewed
- Evaluation Question Matrix (evaluation criteria with key questions, indicators, sources of data, and methodology)
- Questionnaire used and summary of results
- Co-financing tables (if not include in body of report)
- TE Rating scales
- Signed Evaluation Consultant Agreement form
- Signed UNEG Code of Conduct form
- Signed TE Report Clearance form
- *Annexed in a separate file*: TE Audit Trail
- *Annexed in a separate file*: relevant terminal GEF/LDCF/SCCF Core Indicators or Tracking Tools, as applicable

ToR Annex D: Evaluation Criteria Matrix template

Evaluative Criteria Questions	Indicators	Sources	Methodology
Relevance: How does the project relate to the main objectives of the GEF Focal area, and to the environment and development priorities at the local, regional and national level?			
<i>(include evaluative questions)</i>	<i>(i.e. relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc.)</i>	<i>(i.e. project documentation, national policies or strategies, websites, project staff, project partners, data collected throughout the TE mission, etc.)</i>	<i>(i.e. document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc.)</i>
To what extent was the project in line with GEF focal area, UNDP CPD, UNSDCF, Turkey's Intended Nationally Determined Contribution (INDC), 11 th National Development, Turkey's National Climate Change Strategy and Action Plan, Ministry of Energy and Natural Resources (MENR) 2019-2023 Strategic Plan, National Energy Efficiency Action Plan 2017-2023 and Turkish Electricity Transmission Corporation (TEİAŞ) 2019-2023 Strategic Plan along with relevant SDGs?			
To what extent was the theory of change applied in the project relevant to promoting investment in renewable energy technologies and expanding access to environmental and energy services for the			

poor within the framework of “leave no one behind agenda”?			
Are the project objectives and outputs clear, practical and feasible within its frame? Do they clearly address target groups?			
To what extent were lessons learned from other relevant projects considered in the design?			
To what extent were perspectives of men and women who could affect the outcomes, and those who could contribute information or other resources to the attainment of stated results, taken into account during project design processes?			
To what extent was this Project designed as rights based and gender sensitive?			
To what extent does the Project create synergy/linkages with other projects and interventions in the country?			
Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?			
To what extent did the Project contribute to the attainment of the development of outputs and outcomes initially expected/stipulated in the Project Document’s logical			

framework until the end of the project duration?			
To what extent has the UNDP partnership strategy been appropriate and effective?			
In which areas does the project have the greatest achievements? Why and what have been the supporting factors? How can the project build on or expand these achievements?			
In which areas does the project have the fewest achievements? What have been the constraining factors and why? How can or could they be overcome?			
What, if any, alternative strategies would have been more effective in achieving the project objectives?			
To what extent are project management and implementation participatory, and is this participation of target groups/stakeholders contributing towards achievement of the project objectives?			
To what extent has the project been appropriately responsive to the needs of the target groups and changing partner priorities?			

To what extent has the Project contributed to the well-being and human rights of vulnerable groups, including, women? Did the Project effectively contribute to “leave no one behind agenda” and successfully integrate human rights-based approach (HRBA)?			
To what extent has the grant blended ORKÖY-PV soft loan programme been effective in improving forest villagers’ socio-economic standing and energy savings?			
To what extent has the grant blended ORKÖY-PV soft loan programme been effective in creating awareness in forest villages for solar PV deployment and in demonstrating a functioning and viable financing model?			
Did Covid-19 measures have a positive or negative effect on the achievement of Project results?			
Efficiency: Was the project implemented efficiently, in line with international and national norms and standards?			
How well did Project Management work for achievement of results?			
To what extent has there been an economical use of financial and human resources? Have			

resources (funds, staff, time, expertise, etc.) been allocated strategically and cost-effectively to achieve outcomes?			
To what extent have project funds and activities been delivered in a timely manner?			
To what extent do the M&E systems utilized by UNDP ensure effective and efficient project management?			
To what extent was there any identified synergy between UNDP initiatives/projects that contributed to reducing costs while supporting results?			
Sustainability: To what extent are there financial, institutional, socio-political, and/or environmental risks to sustaining long-term project results?			
To what extent will targeted people benefit from the project interventions in the long-term?			
Are there any political or financial risks that may jeopardize sustainability of project results?			
Are the legal frameworks, policies and governance structures and processes in place for sustaining Project benefits?			
To what extent have development partners committed to providing continuing support? What is the risk that the level of			

stakeholder ownership will be insufficient to allow for the Project outcomes/benefits to be sustained?			
To what extent does this UNDP intervention have a well-designed and well-planned exit strategy?			
What could be done to strengthen exit strategies and sustainability in order to support forest villagers?			
Cross-cutting issues and gender equality and women's empowerment: How did the project contribute to gender equality and women's empowerment?			
To what extent has the Project contributed to "leave no one behind agenda" (including disabled, elderly, youth, refugees etc.)?			
To what extent have gender equality and the empowerment of women been addressed in the design, implementation and monitoring of the project?			
Is the gender marker assigned to this project representative of reality?			
To what extent has the project promoted positive changes in gender equality and the empowerment of women? Did any unintended effects emerge for women,			

men or vulnerable groups?			
Impact: Are there indications that the project has contributed to, or enabled progress toward reduced environmental stress and/or improved ecological status?			
To what extent has the project provided an enabling environment and basis for deployment of solar PV installations in rural and urban areas?			
To what extent has the project established a sustainable financing mechanism for renewable energy especially for poorer segments of the society? To what extent is the financing model piloted by the project replicable and up-scalable for other settings and target groups?			
<i>(Expand the table to include questions for all criteria being assessed: Monitoring & Evaluation, UNDP oversight/implementation, Implementing Partner Execution, cross-cutting issues, etc.)</i>			

ToR Annex E: UNEG Code of Conduct for Evaluators

Independence entails the ability to evaluate without undue influence or pressure by any party (including the hiring unit) and providing evaluators with free access to information on the evaluation subject. Independence provides legitimacy to and ensures an objective perspective on evaluations. An independent evaluation reduces the potential for conflicts of interest which might arise with self-reported ratings by those involved in the management of the project being evaluated. Independence is one of ten general principles for evaluations (together with internationally agreed principles, goals and targets: utility, credibility, impartiality, ethics, transparency, human rights and gender equality, national evaluation capacities, and professionalism).

Evaluators/Consultants:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.
8. Must ensure that independence of judgement is maintained, and that evaluation findings and recommendations are independently presented.
9. Must confirm that they have not been involved in designing, executing or advising on the project being evaluated and did not carry out the project's Mid-Term Review.

Evaluation Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System:

Name of Evaluator: _____

Name of Consultancy Organization (where relevant): _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at _____ (Place) on _____ (Date)

Signature: _____

ToR Annex F: TE Rating Scales

Ratings for Outcomes, Effectiveness, Efficiency, M&E, Implementation/Oversight, Execution, Relevance	Sustainability ratings:
<p>6 = Highly Satisfactory (HS): exceeds expectations and/or no shortcomings</p> <p>5 = Satisfactory (S): meets expectations and/or no or minor shortcomings</p> <p>4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings</p> <p>3 = Moderately Unsatisfactory (MU): somewhat below expectations and/or significant shortcomings</p> <p>2 = Unsatisfactory (U): substantially below expectations and/or major shortcomings</p> <p>1 = Highly Unsatisfactory (HU): severe shortcomings</p> <p>Unable to Assess (U/A): available information does not allow an assessment</p>	<p>4 = Likely (L): negligible risks to sustainability</p> <p>3 = Moderately Likely (ML): moderate risks to sustainability</p> <p>2 = Moderately Unlikely (MU): significant risks to sustainability</p> <p>1 = Unlikely (U): severe risks to sustainability</p> <p>Unable to Assess (U/A): Unable to assess the expected incidence and magnitude of risks to sustainability</p>

ToR Annex G: TE Report Clearance Form

Terminal Evaluation Report for (<i>Project Title & UNDP PIMS ID</i>) Reviewed and Cleared By:	
Commissioning Unit (M&E Focal Point)	
Name: _____	
Signature: _____ _____	Date: _____
Regional Technical Advisor (Nature, Climate and Energy)	
Name: _____	
Signature: _____ _____	Date: _____

ToR Annex H: TE Audit Trail

The following is a template for the TE IC to show how the received comments on the draft TE report have (or have not) been incorporated into the final TE report. This Audit Trail should be listed as an annex in the final TE report but not attached to the report file.

To the comments received on (date) **from the Terminal Evaluation of** (project name) (UNDP Project PIMS #)

The following comments were provided to the draft TE report; they are referenced by institution/organization (do not include the commentator's name) and track change comment number ("#" column):

Institution/ Organization	#	Para No./ comment location	Comment/Feedback on the draft TE report	TE IC response and actions taken